

BENEXMART Tuya Zigbee Smart Water Flow Meter (DN15, DN20, DN25)

Tuya Zigbee Smart Water Flow Meter User Manual

Model: DN15, DN20, DN25 (15mm, 20mm, 25mm Tube)

Brand: BENEXMART

1. INTRODUCTION

The BENEXMART Tuya Zigbee Smart Water Flow Meter is designed for accurate measurement of water consumption, water bills, and pipe pressure in various settings. This device integrates with the Tuya smart home ecosystem, providing data monitoring and alarm functions through the Tuya application.

Important Note: This product does not have a valve function and cannot be used to turn water on or off. A Tuya Zigbee Hub is required for this product to function properly and connect to the Tuya app.

2. PRODUCT OVERVIEW

The smart water flow meter features an LCD digital display for direct readings and is available in different pipe sizes (DN15, DN20, DN25) to suit various installation requirements. It is designed for durability and accurate measurement.



Figure 2.1: BENEXMART TuYa Zigbee Smart Water Flow Meter with included fittings.

Product Detail

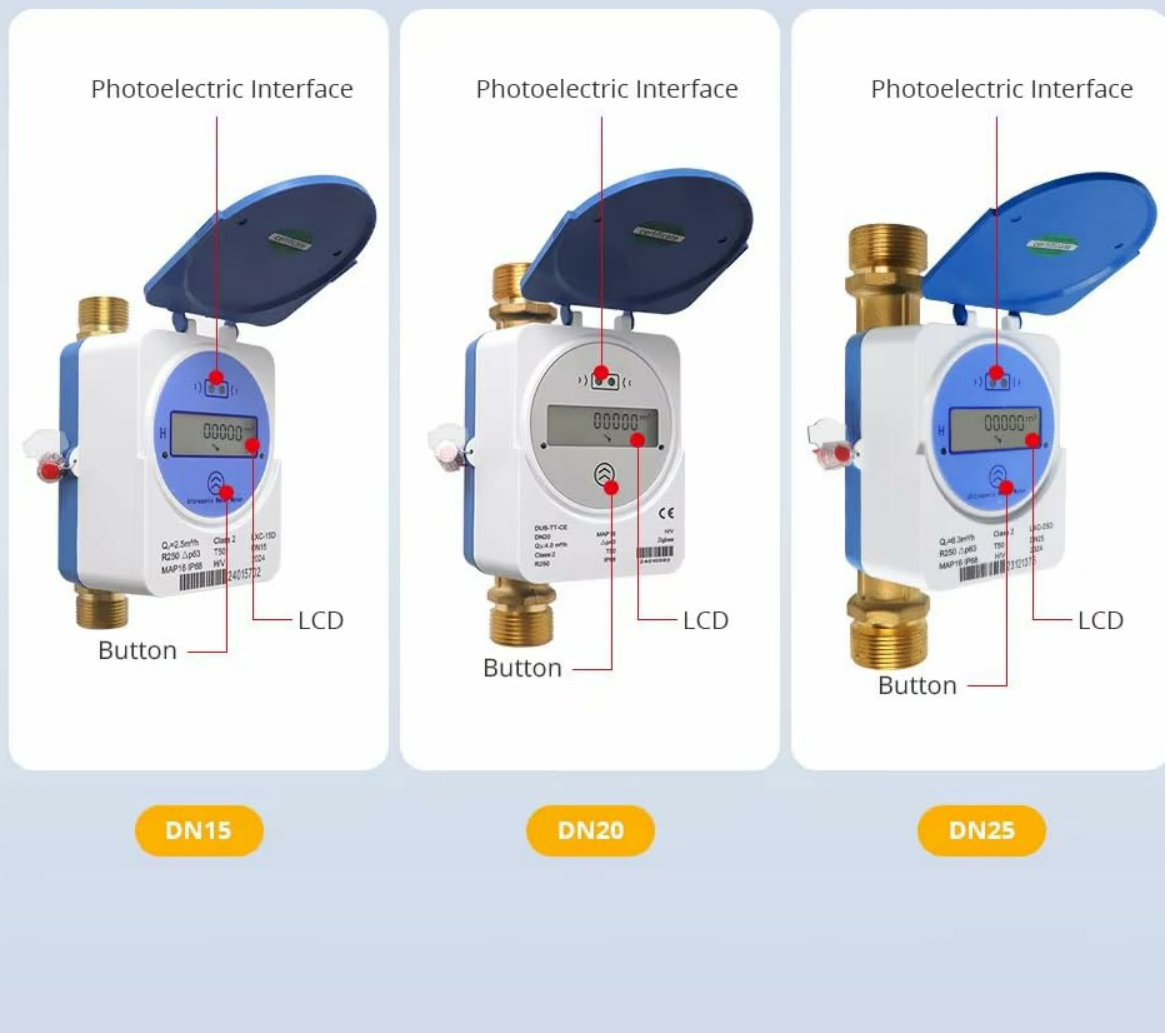


Figure 2.2: Detailed view of the water meter showing the LCD display, button, photoelectric interface, and available sizes (DN15, DN20, DN25).

3. SETUP

3.1 Prerequisites

- A Tuya Zigbee Hub (not included) is required for smart functionality.
- Tuya Smart application installed on your smartphone.

3.2 Installation

Install the water flow meter into your water pipeline according to the appropriate pipe size (DN15, DN20, or DN25). Ensure proper sealing to prevent leaks. The meter should be installed in a location that allows for easy viewing of the LCD display and access for maintenance.



Figure 3.1: Example installation of the smart water flow meter in a pipeline.

3.3 Connecting to Tuya App

Once physically installed, connect the water meter to your Tuya Zigbee Hub. Follow the instructions within the Tuya Smart application to add a new Zigbee device. The device utilizes Tuya Zigbee technology for communication.

Water Quantity Measurement

You can view water consumption, water charges, pipeline pressure and other data in the Tuya APP

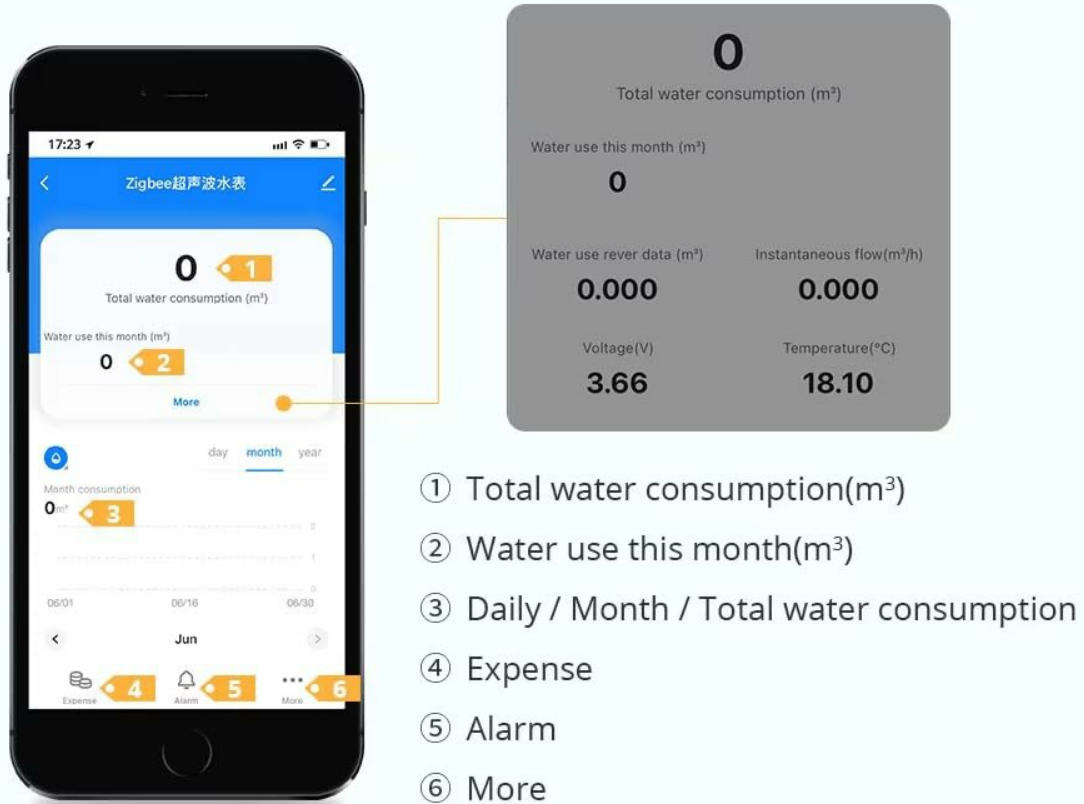


Figure 3.2: The water meter communicates via Zigbee to a Tuya Zigbee Hub, which then connects to the Tuya app on your smartphone.

4. OPERATING

4.1 Data Display on LCD

The integrated LCD screen on the water meter displays various measurement data. You can cycle through different readings by pressing the button on the device.

Data Display

Operation on the panel of the ultrasonic water meter allows you to check the measurement data



LCD Icons	Meaning
	Normal water flow
	Real time
	Pipe burst
	Reverse water flow
	Leakage
	Reserved position
	Alarm warning
ID	Meter address
GAL	Gallon (unit)
m³/h	Cubic meter per hour
m³	Cubic meter (unit)
h	Hour (unit)
GPM	Gallon per minute
°C	Water temperature
	Low battery
T	Reserved position
	NB-IoT communicate normally
	Full screen

Figure 4.1: LCD display and a guide to the icons and their meanings, including normal flow, real-time, pipe burst, reverse flow, leakage, alarm, meter address, units (GAL, m³/h, m³), hour, GPM, water temperature, low battery, and communication status.

4.2 Data Monitoring via Tuya App

The Tuya app provides comprehensive monitoring of water consumption, water bills, and pipe pressure. The app can display water consumption data hourly for the last 7 days and daily for the last year.

Note: Data from the water meter is not uploaded to the app in real-time. By default, data is automatically uploaded to the Tuya app every 12 hours. This setting is fixed and cannot be changed.

Zigbee Signal

This device utilizes Tuya Zigbee technology and requires a Tuya Zigbee Hub for it to function properly



Figure 4.2: Tuya app interface displaying water consumption data, including total consumption, monthly usage, daily/monthly/total consumption, expense, and alarm notifications.

4.3 Alarm Function

The smart water meter is equipped with an efficient alarm function. In the event of an abnormal condition (e.g., leakage, pipe burst), the water meter will send an alarm message to the Tuya application. The application will then push this message to the user, enabling timely action to address the issue.

5. MAINTENANCE

To ensure optimal performance and longevity of your BENEXMART Smart Water Flow Meter, consider the following general maintenance guidelines:

- Regularly inspect the meter and its connections for any signs of leaks or damage.
- Keep the LCD display clean and free from dirt or debris to ensure readability.
- Ensure the meter is not exposed to extreme temperatures or direct sunlight for prolonged periods, which could affect its electronic components.

6. TROUBLESHOOTING

While specific troubleshooting steps are not detailed, the device's alarm function is designed to notify users of abnormal conditions. If you encounter issues not covered by the alarm system or require further assistance, please refer to the support section.

- **No Data in App:** Check if your Tuya Zigbee Hub is online and properly connected. Ensure the water meter is within range of the hub. Remember that data uploads occur every 12 hours, so real-time updates are not available.
- **LCD Display Issues:** If the display is blank or unreadable, check for low battery indication (if applicable) or contact support.

7. SPECIFICATIONS

Feature	Description
Product Name	Tuya Zigbee Smart Water Flow Meter
Brand	BENEXMART
Models Available	DN15 (1/2"), DN20 (3/4"), DN25 (1")
Connectivity	Zigbee (requires Tuya Zigbee Hub)
Data Upload Frequency	Every 12 hours (fixed)
Measurement Functions	Water consumption, water bills, pipe pressure
Data Display	LCD on device, Tuya App (hourly for 7 days, daily for last year)
Alarm Function	Sends alarm messages to Tuya App for abnormal conditions
Applicable Scenarios	Farmhouses, shopping malls, rental houses, domestic use
Manufacturer	benexmart
Country of Origin	China
First Available Date	January 10, 2025

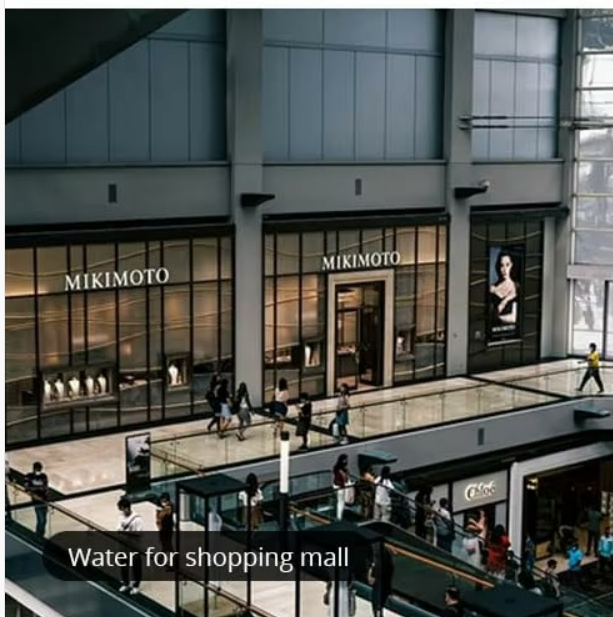
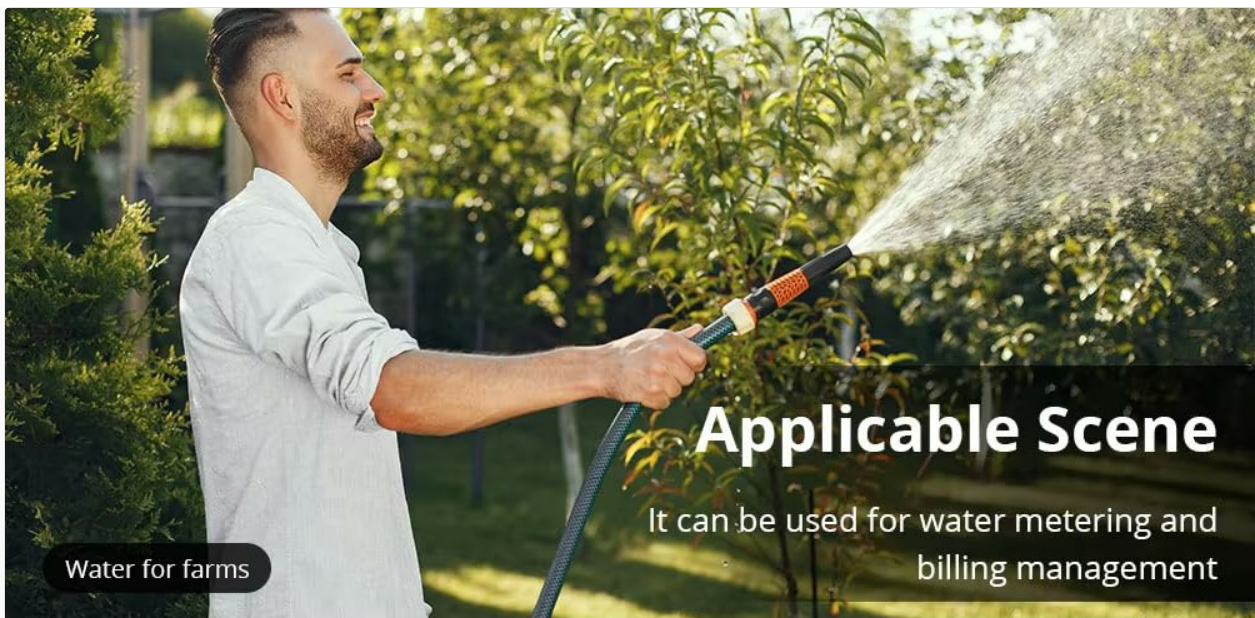


Figure 7.1: The smart water flow meter is suitable for various applications, including garden irrigation, commercial buildings, and residential water monitoring.

8. WARRANTY AND SUPPORT

For specific warranty information, technical support, or any inquiries regarding your BENEXMART Tuya Zigbee Smart Water Flow Meter, please contact the Benexmart store service directly. They can provide detailed assistance and address any product-related concerns.

You can typically find contact information for Benexmart through the retailer where you purchased the product or by visiting the official BENEXMART store page online.